

Title (en)

DEVICES AND METHODS FOR MINIMALLY INVASIVE SUTURING

Title (de)

VORRICHTUNG UND VERFAHREN FÜR MINIMAL-INVASIVES CHIRURGISCHES NÄHEN

Title (fr)

DISPOSITIFS ET PROCÉDÉS POUR UNE SUTURE INVASIVE MINIMALE

Publication

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Application

EP 11830008 A 20110930

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Abstract (en)

[origin: US7993354B1] Devices and methods for minimally invasive suturing are disclosed. One suturing device for minimally invasive suturing includes a proximal section a distal end, and an intermediate region therebetween. The device includes a suture head assembly having a suturing needle with a pointed end and a second end. The suturing needle is capable of rotating about an axis approximately perpendicular to a longitudinal axis of the device, wherein the pointed end of the suturing needle is positioned within the suture head assembly prior to deployment of guides that are adapted and configured to guide the needle around a circular path when advanced by a drive mechanism having a needle driver for engaging and rotating the suturing needle.

IPC 8 full level

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Citation (search report)

- [XY] US 2007135838 A1 20070614 - MEYER MATTHEW E [US]
- [IY] US 2010152751 A1 20100617 - MEADE JOHN C [US], et al
- [Y] EP 0648474 A1 19950419 - ETHICON INC [US]
- [Y] EP 2103262 A1 20090923 - MANI INC [JP]
- See references of WO 2012044998A2

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US 7993354 B1 20110809; AU 2011308586 A1 20130411; AU 2015238788 A1 20151112; AU 2015238788 B2 20170810; AU 2015238788 C1 20180118; AU 2017206251 A1 20170810; AU 2017206251 B2 20180125; AU 2018202790 A1 20180510; AU 2018202790 B2 20190124; AU 2019202851 A1 20190516; AU 2019202851 B2 20201126; CA 2812960 A1 20120405; CA 2812960 C 20171107; CA 2977640 A1 20120405; CA 2977643 A1 20120405; CN 103220990 A 20130724; EP 2621349 A2 20130807; EP 2621349 A4 20150916; EP 2621349 B1 20191218; EP 3628240 A1 20200401; JP 2013542763 A 20131128; JP 5873501 B2 20160301; KR 101531659 B1 20150625; KR 20130066698 A 20130620; WO 2012044998 A2 20120405; WO 2012044998 A3 20120614

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